EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Erik Heter on Wednesday, August 12, 2009.

IN THE CLAIMS

Please **cancel** claims 2, 4-14, 16-17, 25-28 without prejudice or disclaimer.
Please **amend** claims 1, 3, 15 without prejudice or disclaimer.

Please amend claims 1, 3, 15 as follow:

1. (Currently Amended) In a multiprocessing computer system comprising a plurality of processing nodes interconnected through an interconnect structure, wherein the plurality of processing nodes includes a first processing node, a second processing node, and a third processing node, a method for lock request arbitration comprising:

receiving a lock request at the second processing node from the first processing node;

determining, at the second processing node, whether the lock request is ready for service, wherein determining whether the lock request is ready for service comprises the second processing node placing the lock request in a queue and

the second processing node monitoring the queue to determine whether the lock request is ready for service;

issuing a broadcast message from the second processing node to the first and the third processing nodes in response to determining that the lock request is ready for service, wherein the broadcast message informs the third processing node of servicing of the lock request, and wherein the broadcast message includes a lock bit to inform the third processing node of the servicing of the lock request;

receiving a first probe response at the second processing node from the first processing node in response to sending the broadcast message;

receiving a second probe response at the second processing node from the third processing node in response to sending the broadcast message, wherein the probe response is sent from the third processing node in response to the third processing node ceasing issuance of new requests;

in response to receiving the first and second probe response messages, granting lock ownership to the first processing node and transmitting from the second processing node to the first processing node a lock response message to inform the first processing node of the lock ownership.

3. (Currently Amended) The method as recited in claim [[2]] 1, wherein monitoring the queue comprises:

sequentially processing each preceding lock request in the queue.

15. (Currently Amended) A multiprocessing computer system comprising:

a plurality of processing nodes interconnected through an interconnect structure to each other and to shared system resources, wherein the plurality of processing nodes comprises:

a first processing node configured to generate a lock request prior to commencing execution of an operation required access to the shared system resources;

a second processing node; and

a third processing node configured to receive and process the lock request, and transmit a first broadcast message to the first and the second processing nodes in response to determining that the lock request is ready for service, wherein the third processing node comprises a queue for pending lock requests, wherein the third processing node is configured to place the lock request in the queue and to monitor the queue to determine when the lock request is ready for service, wherein the first broadcast message comprises a lock bit, wherein the third processing node is configured to set the lock bit in response to determining the lock request ready for service;

wherein each of the first and the second processing nodes is configured to transmit a corresponding first probe response message to the third processing node in response to receiving the first broadcast message, wherein the second processing node is further configured to cease issuance of new requests and to

transmit the corresponding first probe response message upon the cessation of the issuance;

wherein, in response to receiving the corresponding first probe response message from the first and the second processing nodes, the third processing node is configured to grant lock ownership to the first processing node and transmit lock response message to the first processing node to inform the first processing node of the lock ownership.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA N. BURGESS whose telephone number is (571)272-3996. The examiner can normally be reached on M-F (8:00am-4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Barbara N Burgess/
Examiner, Art Unit 2457

Barbara N Burgess
Examiner
Art Unit 2457

August 14, 2009

/ARIO ETIENNE/

Supervisory Patent Examiner, Art Unit 2457